

General

Title

Chronic graft versus host disease (cGVHD): percentage of patients diagnosed with cGVHD with a standardized scoring system used to plan therapy.

Source(s)

Proposed chronic graft versus host disease measure set: questionnaire, measures with specifications, glossary. Arlington Heights (IL): American Society for Blood and Marrow Transplantation; 26 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients diagnosed with chronic graft versus host disease (cGVHD) with a standardized scoring system used to plan therapy.

Rationale

The pathogenesis of chronic graft versus host disease (cGVHD) is poorly understood. Symptoms usually present within 3 years after allogeneic hematopoietic cell transplantation (HCT) and are often preceded by a history of acute GVHD. Manifestations of chronic GVHD may be restricted to a single organ or tissue or may be widespread. Chronic GVHD can lead to debilitating consequences, e.g., joint contractures, loss of sight, end-stage lung disease, or mortality resulting from profound chronic immune suppression leading to recurrent or life-threatening infections.

Support (verbatim) from National Institutes of Health (NIH) Consensus Development Project: The time-honored description of limited versus extensive chronic GVHD was proposed from only 20 cases published

in 1980. The [NIH] Working Group proposes a new global assessment of chronic GVHD severity that is clinically suitable and is appropriate for use as an inclusion criterion in therapeutic clinical trials or as an indication for systemic immunosuppressive treatment. The global scoring system reflects the clinical effect of chronic GVHD on the patient's functional status.

Elements included in the proposed global scoring system include both the number of organs or sites involved and the severity within each affected organ (note that performance status scoring is not incorporated into the global scoring system). The global descriptions of mild, moderate, and severe were chosen to reflect the degree of organ impact and functional impairment due to chronic GVHD. Although scoring is often used at the time of initial diagnosis, evaluating the clinical score periodically during the course of chronic GVHD may revise prognostic expectations and better describe the current severity of chronic GVHD.

Statement from American Society for Blood and Marrow Transplantation (ASBMT) Task Force on guidelines: The proposed scoring tool is provisional and will be updated as the results of prospective validation studies become available (see the original measure documentation for details). Use of the tool will add structure to therapeutic options (topical versus systemic) and enable improved clinical trials which will result in further improvements to evidence based guidelines. Early research results indicate the scores calculated using the NIH tool to have prognostic significance.

Statements (verbatim) on gap: Clinical syndromes resembling acute graft versus host disease (aGVHD) are increasingly recognized beyond 100 days after hematopoietic stem cell transplantation (HSCT) and may be labeled as cGVHD. In addition, patients with aGVHD may progress to develop cGVHD with distinctive signs and symptoms of both acute and chronic GVHD. In addition, the old grading system of limited versus extensive GVHD was designed to identify patients needing systemic immune suppression and does not capture the severity of individual organ involvement. Several grading schemes can predict survival following cGVHD. However, all lack consistent scoring and assessment of each involved organ to determine the overall severity of the disease. Recognizing these limitations, the diagnosis and staging working group of the NIH Consensus Development Project on cGVHD proposed standard criteria for diagnosis, organ scoring and global assessment of cGVHD severity.

Statement from the ASBMT Task Force on gap: The most recent standardized scoring system was released in September 2005 and is relatively new to the transplant community. Not all transplant physicians are yet aware of or using the scoring system. We believe there is a critical need for more education to drive awareness of the new system to close the gap in use.

Evidence for Rationale

Arai S, Jagasia M, Storer B, Chai X, Pidala J, Cutler C, Arora M, Weisdorf DJ, Flowers ME, Martin PJ, Palmer J, Jacobsohn D, Pavletic SZ, Vogelsang GB, Lee SJ. Global and organ-specific chronic graft-versus-host disease severity according to the 2005 NIH Consensus Criteria. *Blood*. 2011 Oct 13;118(15):4242-9. [PubMed](#)

Arora M, Nagaraj S, Witte J, DeFor TE, MacMillan M, Burns LJ, Weisdorf DJ. New classification of chronic GVHD: added clarity from the consensus diagnoses. *Bone Marrow Transplant*. 2009 Jan;43(2):149-53. [PubMed](#)

Filipovich AH, Weisdorf D, Pavletic S, Socie G, Wingard JR, Lee SJ, Martin P, Chien J, Przepiorka D, Couriel D, Cowen EW, Dinndorf P, Farrell A, Hartzman R, Henslee-Downey J, Jacobsohn D, McDonald G, Mittleman B, Rizzo JD, Robinson M, Schubert M, Schultz K, Shulman H, Turner M, Vogelsang G, Flowers ME. National Institutes of Health consensus development project on criteria for clinical trials in chronic graft-versus-host disease: I. Diagnosis and staging working group report. *Biol Blood Marrow Transplant*. 2005 Dec;11(12):945-56. [PubMed](#)

Pidala J, Kurland B, Chai X, Majhail N, Weisdorf DJ, Pavletic S, Cutler C, Jacobsohn D, Palmer J, Arai S, Jagasia M, Lee SJ. Patient-reported quality of life is associated with severity of chronic graft-versus-

host disease as measured by NIH criteria: report on baseline data from the Chronic GVHD Consortium. Blood. 2011 Apr 28;117(17):4651-7. [PubMed](#)

Proposed chronic graft versus host disease measure set: questionnaire, measures with specifications, glossary. Arlington Heights (IL): American Society for Blood and Marrow Transplantation; 26 p.

Shulman HM, Sullivan KM, Weiden PL, McDonald GB, Striker GE, Sale GE, Hackman R, Tsoi MS, Storb R, Thomas ED. Chronic graft-versus-host syndrome in man. A long-term clinicopathologic study of 20 Seattle patients. Am J Med. 1980 Aug;69(2):204-17. [PubMed](#)

Sullivan KM. Graft vs. host disease. In: Blume KG, Forman SJ, Appelbaum FR, editor(s). Thomas' Hematopoietic Cell Transplantation. 3rd ed. Malden (MA): Blackwell Publishing; 2004. p. 635-64.

Primary Health Components

Chronic graft versus host disease (cGVHD); standardized scoring system; therapy

Denominator Description

The number of patients in your selection in diagnosed with chronic graft versus host disease (cGVHD) (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

The number of patients in your selection diagnosed with chronic graft versus host disease (cGVHD) AND standardized scoring system used to plan therapy (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Reported incidence rates of chronic graft versus host disease (cGVHD) after allogeneic transplantation range from 6% to 80% according to recipient age, donor type, hematopoietic cell transplantation (HCT) source (peripheral blood, bone marrow, or umbilical cord blood stem cells), graft manipulation (T-cell depletion), and use of post transplantation donor lymphocyte infusion (DLIs). Reliable incidence estimates in different cohorts of HCT recipients are compromised by (1) lack of standardized, widely used diagnostic guidelines; (2) variability in observer experience; (3) limited expert follow-up at a distance from transplant centers; (4) differences in the statistical methods applied (e.g., use of the Kaplan-Meier versus cumulative incidence estimates and variable requirement for some minimal survival [60-100 days] for patients to be considered at risk of chronic GVHD); and (5) the sometimes protean nature of early chronic GVHD symptoms, which mimic alternative diagnoses.

Evidence for Additional Information Supporting Need for the Measure

Filipovich AH, Weisdorf D, Pavletic S, Socie G, Wingard JR, Lee SJ, Martin P, Chien J, Przepiorka D, Couriel D, Cowen EW, Dinndorf P, Farrell A, Hartzman R, Henslee-Downey J, Jacobsohn D, McDonald G, Mittleman B, Rizzo JD, Robinson M, Schubert M, Schultz K, Shulman H, Turner M, Vogelsang G, Flowers ME. National Institutes of Health consensus development project on criteria for clinical trials in chronic graft-versus-host disease: I. Diagnosis and staging working group report. Biol Blood Marrow Transplant. 2005 Dec;11(12):945-56. [PubMed](#)

Remberger M, Aschan J, Lonnqvist B, Carlens S, Gustafsson B, Hentschke P, Klaesson S, Mattsson J, Ljungman P, Ringden O. An ethnic role for chronic, but not acute, graft-versus-host disease after HLA-identical sibling stem cell transplantation. Eur J Haematol. 2001 Jan;66(1):50-6. [PubMed](#)

Rocha V, Wagner JE Jr, Sobocinski KA, Klein JP, Zhang MJ, Horowitz MM, Gluckman E. Graft-versus-host disease in children who have received a cord-blood or bone marrow transplant from an HLA-identical sibling. Eurocord and International Bone Marrow Transplant Registry Working Committee on Alternative Donor and Stem Cell Sources. N Engl J Med. 2000 Jun 22;342(25):1846-54. [PubMed](#)

Sullivan KM, Agura E, Anasetti C, Appelbaum F, Badger C, Bearman S, Erickson K, Flowers M, Hansen J, Loughran T, et al. Chronic graft-versus-host disease and other late complications of bone marrow transplantation. Semin Hematol. 1991 Jul;28(3):250-9. [75 references] [PubMed](#)

Extent of Measure Testing

The Chronic Graft Versus Host Disease (cGVHD) measure set was developed by the American Society for Blood and Marrow Transplantation (ASBMT) using a rigorous methodology (adapted from the American Medical Association's Physician Consortium for Performance Improvement [AMA-PCPI] and including field testing) and adapted for use in Practice Improvement Modules (PIMs) by the American Board of Internal Medicine (ABIM).

Evidence for Extent of Measure Testing

Joseph TL. (Executive Director, American Society for Blood and Marrow Transplantation). Personal communication. 2013 Jan 21. 1 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Hospital Inpatient

Hospital Outpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Clinical Practice or Public Health Sites

Statement of Acceptable Minimum Sample Size

Specified

Target Population Age

All ages

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

12 months

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

The number of patients in your selection diagnosed with chronic graft versus host disease (cGVHD)

Note: Patients can be included in the chart abstraction if:

They have been seen by the practice within the past 12 months; and
Management decisions regarding care are made primarily by providers in the practice.

Select at least 10 of your patients who have had hematopoietic cell transplant (HCT) and cGVHD. Refer to the original measure documentation for administrative codes.

Exclusions

None

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

The number of patients in your selection diagnosed with chronic graft versus host disease (cGVHD) AND standardized scoring system used to plan therapy

Note: This requires documentation in the patient's medical record that a standardized scoring system was used to plan therapy (see the original measure documentation for details).

Exclusions

None

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

American Society for Blood and Marrow Transplantation/National Institutes of Health (ASBMT/NIH) consensus scoring system

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Patients diagnosed with cGVHD with a standardized scoring system used to plan therapy.

Measure Collection Name

Chronic Graft Versus Host Disease Measure Set

Submitter

American Society for Blood and Marrow Transplantation - Professional Association

Developer

American Society for Blood and Marrow Transplantation - Professional Association

Funding Source(s)

American Society for Blood and Marrow Transplantation

Composition of the Group that Developed the Measure

The American Society for Blood and Marrow Transplantation (ASBMT) Education Practice Improvement Modules Task Force:

Linda Burns, MD (*chair*)
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Mark B Juckett, MD
Vivek Roy, MD
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Sue Frechette, BSN, MBA Consultant

Financial Disclosures/Other Potential Conflicts of Interest

Conflicts, if any, are disclosed in accordance with the American Society for Blood and Marrow Transplantation (ASBMT) conflict of interest policy.

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2012 Apr

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in February 2017.

Measure Availability

Source not available electronically.

For more information, contact the American Society for Blood and Marrow Transplantation (ASBMT) at 85 W. Algonquin Road, Suite 550, Arlington Heights, IL 60005; Phone: 847-427-0224; Fax: 847-427-9656; Web site: www.asbmt.org ; E-mail: mail@asbmt.org.

NQMC Status

This NQMC summary was completed by ECRI Institute on September 24, 2013. The information was verified by the measure developer on October 25, 2013.

The information was reaffirmed by the measure developer on February 8, 2017.

Copyright Statement

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

Production

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